

65005017 amd fnl

2

CARBONARO 1

Amendments to the Claims

Please amend the claims as follows:

5

1. (Currently Amended) A communication system that enables remote non-cordless land line station devices to make and receive calls over a wireless network using a wireless phone, such as a cell phone, in series between said wireless network and said remote non-cordless land line station devices, said system comprising:

10

a plurality of wireless interfaces;

a cell phone base unit coupled to a first one of said wireless interfaces;

said cell phone base unit is adapted to be coupled signal-wise to a cell phone;

at least one remote non-cordless land line station device coupled to another one of said wireless interfaces; and

15

apparatus including said wireless interfaces responsive to the receipt of an incoming call from said wireless network for extending said incoming call via said cell phone to said at least one remote non-cordless land line station device.

20

2. (Currently Amended) The system of claim 1 characterized in that said apparatus for extending further comprises:

apparatus that monitors said incoming call; and

apparatus that detects an on-hook signal at said at least one remote non-cordless land line station device for terminating said call between said at least one remote non-cordless land line station device and said wireless network via said cell

25

3. (Currently Amended) The system of claim 2 characterized in that said apparatus for extending further comprises:

apparatus responsive to the initiation of an outgoing call by said at least one

30

remote non-cordless land line station device for extending said outgoing call via said wireless interfaces and said cell phone and said wireless network to a called station.

65005017 amd fnl

3

CARBONARO 1

4. (Currently Amended) The system of said claims 1 characterized in that said at least one remote non-cordless land line station device comprises any one of or any combination of:

- 5 non-cordless land line ~~phones~~ telephones;
- cell phones;
- wireless phones;
- cordless phones;
- computers;
- 10 PDAs;
- communication paths extending to other networks and/or network appliances;
- fax machines;
- fire, security and alarm detection devices;
- printers; and
- 15 household appliances.

5. (Currently Amended) The system of claim 4 wherein said non-cordless land line station devices comprises non-cordless land line telephones, said system further comprising:

- 20 apparatus that detects an off-hook state of a calling one of said remote non-cordless land line ~~station devices~~ telephones;
- apparatus including said wireless interfaces that transmits said off-hook signal from said one calling remote non-cordless land line ~~station devices~~ telephone to said cell phone;
- 25 apparatus that activates said cell phone in response to the receipt of said on-hook signal;
- apparatus including said wireless interface associated with said one calling remote non-cordless land line ~~station devices~~ telephone for receiving a called station number from said one non-cordless calling remote land line ~~station devices~~ telephone;

65005017 amd fnl

4

CARBONARO 1

apparatus including said wireless interface associated with said one calling remote non-cordless land line ~~station-device~~ telephone for transmitting said called station number to said cell phone;

5 said cell phone being responsive to the receipt of said called station number for initiating the establishment of a call via said wireless network to said called station;

apparatus for detecting an on-hook state of said called station or of said one calling remote non-cordless land line ~~station-device~~ telephone for transmitting a call end signal to said cell phone; and

10 said cell phone being responsive to said receipt of said call end signal for ending said call to said called station.

6. (Currently Amended) The system of claim 4 further comprising:

apparatus including said cell phone for detecting the receipt of an incoming call from said wireless network;

15 apparatus including said cell phone responsive to said detecting for applying a ringing control signal to the wireless interface associated with said cell phone;

apparatus for transmitting said ringing control signal to the wireless interfaces associated with said remote non-cordless land line ~~station-devices~~ telephones;

20 apparatus responsive to the receipt of said ringing control signal for applying ringing current to said remote non-cordless land line ~~station-devices~~ telephones;

apparatus for generating an off-hook signal at a responsive one of remote non-cordless land line ~~station-devices~~ telephones;

said off-hook signal is transmitted to said cell phone via said wireless interfaces;

25 said cell phone being responsive to the receipt of said off-hook signal for terminating the generation of said ring control signal;

said wireless interfaces being responsive to the termination of said ringing control signal for termination ringing at said remote non-cordless land line ~~station-devices~~ telephones;

said cell phone being effective to monitor said ~~in-coming~~ incoming call;

65005017 amd fnl

5

CARBONARO 1

apparatus for detecting an on-hook state of said called station or of said responsive remote non-cordless land line ~~station device~~ telephone for transmitting a call end signal to said cell phone; and

5 said cell phone being responsive to said receipt of said call end signal for ending said incoming call.

7. (Currently Amended) The system of claim 1 characterized in that said cell phone is adapted to serve calls between said wireless network and said remote non-cordless land line ~~devices~~ telephones only when said cell phone is connected signal-wise to said base unit to connect said cell phone with said first wireless interface via said base unit.

8. (Currently Amended) In a system having a first wireless interface adapted to be coupled to a cell phone, said system further having a second wireless interface adapted to be coupled to a remote non-cordless land line ~~station device~~ telephone;

15 said system further comprising:

apparatus for receiving indicia of a call request ~~in~~ by either said first or said second wireless interfaces; and

apparatus ~~extending that extends~~ said call request to the other of said first or second wireless interfaces to extend a call connection between said cell-phone and said remote non-cordless land line ~~station device~~ telephone via said first and second wireless interfaces.

9. (Currently Amended) The system of claim 8 characterized in that:

25 said apparatus for receiving is operable to receive said indicia within said first wireless interface from said cell phone and to extend said call via said second wireless interface to said remote non-cordless land line ~~station device~~ telephone; and

said apparatus for receiving is also operable to receive said indicia within said second wireless interface from said remote non-cordless land line ~~station device~~ telephone and to extend said call connection via said first wireless interface to said cell phone.

65005017 and fnl

6

CARBONARO 1

10. (Currently Amended) The apparatus of claim 9 wherein a different one of said wireless interfaces is individual to and integrated into a different one of said remote non-cordless land line telephones.

~~A method of operating the system of claim 8 comprising the steps of:~~

5 ~~receiving indicia of a call request in either said first or said second wireless interfaces; and~~

~~extending said call request to the other of said first or second wireless interfaces to extend a call between said cell phone and said remote non-cordless land line station device via said first and second wireless interfaces.~~

10

11. (Currently Amended) The apparatus of claim 10 wherein each of said remote non-cordless land line telephones has a pair of tip and ring conductors adapted to be connected to a different one of said wireless interfaces, and each of said remote non-cordless land line telephones includes conductors connecting a handset of said remote
15 non-cordless land line telephones to a base of said remote non-cordless land line telephones.

~~The method of claim 10 wherein:~~

20 ~~said step of receiving receives said indicia within said first wireless interface from said cell phone and extends said call via said second wireless interface to said remote land line station device; and~~

~~said step of extending receives said indicia within said second wireless interface from said land line station device and extends said call via said first wireless interface to said cell phone.~~

25 12. (Currently Amended) A method of operating a communication system adapted to enable remote non-cordless land line station devices to make and receive calls over a wireless network using a wireless phone, such as a cell phone, in series between said wireless network and said remote non-cordless land line station devices, said system comprising:

30 a plurality of wireless interfaces;

a cell phone base unit coupled to a first one of said wireless interfaces;

65005017 and fnl

7

CARBONARO 1

said cell phone base unit is adapted to be coupled signal-wise to a cell phone;
at least one remote non-cordless land line station device coupled to another one
of said wireless interfaces; said method comprising the step of:

operating apparatus within said wireless interfaces responsive to the receipt of
5 an incoming call from said wireless network for extending said incoming call via said cell
phone and said wireless interfaces to said at least one remote non-cordless land line
station device.

13. (Currently Amended) The method of claim 12 further comprising the steps of:
10 monitoring said incoming call; and
operating said cell phone for detecting an on-hook signal generated by said at
least one remote non-cordless land line station devices for terminating said call between
said at least one remote non-cordless land line station device and via said wireless
network via said cell phone.

15
14. (Currently Amended) The method of claim 13 further comprising the step of:
detecting the initiation of an outgoing call by said at least one remote non-
cordless land line station device for extending said outgoing call via said wireless
interfaces and said cell phone and via said wireless network to a called station.

20
15. (Currently Amended) The method of said claim 12 characterized in that said at
least one remote non-cordless land line station device comprises any one of or any
combination of:

non-cordless land line phones telephones;
25 ~~cell phones~~;
~~wireless phones~~;
~~cordless phones~~;
computers;
printers;
30 PDAs;

65005017 amd fnl

8

CARBONARO 1

communication paths extending to other networks and/or network appliances;
fax machines;
fire, security and alarm detection devices; and
household appliances.

5

16. (Currently Amended) The method of claim 15 wherein said non-cordless land line station device comprises a non-cordless land line telephone, and wherein a different one of said wireless interfaces is individual to and integrated into a different one of said remote non-cordless land line telephones, said method further comprising the steps of:

10 detecting an off-hook state of a calling one of said remote non-cordless land line station devices telephones;

transmitting said off-hook signal from said calling remote non-cordless land line station device telephone to said cell phone;

activating said cell phone in response to the receipt of said off-hook signal;

15 ~~transmitting a called station number from said calling remote land line station device to said wireless interface associated with said calling remote land line station device;~~

transmitting said a called station number from said wireless interface associated with said calling remote non-cordless land line ~~station device~~ telephone to said cell

20 phone; and

operating said cell phone responsive to the receipt of said called station number for initiation the establishment of a call via said wireless network to said called station.

17. (Currently Amended) The method of claim 16 further including the steps of:

25 operating said cell phone for detecting an on-hook state of said called station or said calling remote non-cordless land line ~~station device~~ telephone; ~~and transmitting a call end signal to said cell phone; and~~

said cell phone being responsive to said ~~receipt~~ detection of said call end signal for ending said call ~~to said called station.~~

30

65005017 amd fnl

9

CARBONARO 1

18. (Currently Amended) The method of claim 17 characterized in that said system exchanges the following signals between said calling remote non-cordless land line ~~station-device~~ telephone and said cell phone during the serving of a call initiated by said calling remote non-cordless land line ~~station device~~ telephone:

5 an off-hook signal generated by said calling remote non-cordless land line ~~station device~~ telephone is transmitted via said wireless interfaces to said cell phone;

said calling remote non-cordless land line ~~station-device~~ telephone dials the number of the called station to which said call is to be extended;

10 said dialed number is transmitted to said cell phone which transmits said dialed number to said wireless network for the establishment of a connection to said called station;

said cell phone monitors said call until an on-hook signal is detected at said calling remote non-cordless land line ~~station-device~~ telephone and/or at said called station; and

15 said cell phone is responsive to the detection of said off-hook signal to terminate the call between said calling remote non-cordless land line ~~station-device~~ telephone and said called station.

19. (Currently Amended) The method of claim 17 characterized in that said system exchanges the following signals between said cell phone and said calling remote non-cordless land line ~~station-devices~~ telephones during the serving of a call received by said cell phone from said wireless network

20 in response to receipt of a call from said wireless network said cell phone transmits a ringing control signal via said wireless interfaces of said remote non-cordless land line ~~station-devices~~ telephones;

25 said ringing control signal activates a ring generator in the wireless interface associated with each of said remote non-cordless land line ~~station-devices~~ telephones to apply ringing current to of said remote non-cordless land line ~~station-devices~~ telephones;

30 the generation of an off-hook signal at a responding one of said remote non-cordless land line ~~station-devices~~ telephones transmits a signal to the wireless interface

65005017 amd fnl

10

CARBONARO 1

associated with said cell phone to terminate the generation of said ringing control signal by said cell phone;

said cell phone terminates the generation of said ringing control signal to terminate ringing at said remote non-cordless land line ~~station devices~~ telephones;

5 said cell phone establishes a voice path between said cell phone and said responding one of said remote non-cordless land line ~~station devices~~ telephones; and

said cell phone monitors said call and terminates said call upon the generation of an on-hook signal by said responding one of said remote non-cordless land line ~~station devices~~ telephones.

10

20. (Currently Amended) The method of claim 15 characterized in that step of operating said cell phone is effective to serve calls between said wireless network and said remote non-cordless land line ~~station devices~~ telephones only when said cell phone is connected signal-wise to said base unit to connect said cell phone with said

15 first wireless interface via said base unit.